

THE ZOOLOGIST.

THIRD SERIES.

VOL. XV.]

AUGUST, 1891.

[No. 176.]

THE POLECAT, *MUSTELA PUTORIUS*.

By THE EDITOR.

PLATE III.

OWING chiefly to the increased attention paid to the preservation of game, the Polecat, Fomart, or Fitchet, has of late years suffered considerable persecution, and at the present time must be regarded as one of the rarer British animals.

Twenty or five-and-twenty years ago it was comparatively common in most of the big woods in the home counties, and within a very few miles of London there were several parishes (to the north-west of the metropolis) wherein its haunts were well known to the writer.

In Lord Mansfield's woods at Hampstead and Highgate, at the time referred to, they might often be seen hanging up with other "vermin" on the keeper's gallows, and the mention of this locality recalls to memory a curious incident connected with its occurrence there which may be worth mentioning. It must have been about the summer of 1866 or 1867 that rambling alone one afternoon in Ken Wood, with a pocketful of chip-boxes for eggs, insects, or shells of any land molluscs that might come to hand, I stood for some minutes before the keeper's tree to examine the dead bodies of his latest victims, and was particularly struck with a fine large Polecat, which, having been first trapped, had then been killed by a blow on the head which had partly laid bare the skull. It had hung suspended so long as to have become quite dessicated, and, as the skull was perfect, I was tempted to remove

it for the purpose of cleansing and preserving it. Hardly had I commenced operations with my pocket-knife when I was struck by the extraordinary number of spiders which issued from the interstices of the dried skin and made off in all directions. Wondering to what species they might belong, I proceeded to catch and box as many as I could before they disappeared, and the same evening I despatched them by post for identification to my friend Mr. O. Pickard-Cambridge, in Dorsetshire, begging him to tell me something about them. I was soon afterwards agreeably surprised to hear from him that I had forwarded specimens of an apparently undescribed species of *Linyphia*, but that, as I had sent only females and young males, the fact could not be positively asserted until some adult males could be examined. These I tried in vain to procure by returning to the keeper's tree and searching around it. But the Polecat, for want of the head by which it had been suspended, having fallen to the ground and been kicked aside, was no longer to be found, and my knowledge of spiders being too rudimentary to enable me to recognise for certain the species of which I was in search, I could only catch what spiders I could see in the immediate neighbourhood, in the hope that amongst them there might be what was wanted. But this did not prove to be the case, and I thus lost the chance of being announced as the discoverer of a new species. But this by the way—a trifling incident *à propos* of a former haunt of the Polecat in MIDDLESEX. Other localities noticed in those days as sheltering Polecats were Hendon, Edgwarebury, Stanmore, Harrow, the well-springs at Willesden, and Kingsbury, where I once helped to unearth a family-party of six—namely, two old ones and four full-grown young ones—from a cavity in a grotto made of large loose flints and covered with ferns and stonecrops, within sight of our windows. I had discovered their lair by observing their footprints round the cairn after rain, and lifting off the flints one by one, and as noiselessly as possible, we at length discovered them curled up like Ferrets. The mysterious disappearance of numerous ducklings and chickens from our poultry-yard, which had been for some time noticed, was now more than hinted at; but, strange to say, there were very few *receptamenta* in the cairn. The conclusion, I think, at which we arrived was, that the Polecats were too clever to bring their prey home with them to such an exposed spot, and must have therefore

"dined out" every evening. At any rate, it was not the remains of their prey lying about which betrayed their whereabouts.

In the woodlands of SURREY and SUSSEX, in years gone by, I have occasionally come across traces of the Polecat, and seen recently-killed specimens strung up by the keepers, or brought home to be stuffed by the local taxidermist. But of late years this animal has become very much scarcer, and bids fair to be known only by the stuffed specimens in the keepers' cottages.

Some keepers, wiser in their generation, instead of destroying them, are glad now and then to get one alive, to cross with their Ferrets. And they are no doubt right; for the hybrids thus produced are very good rat-killers, especially in stacks, where great activity is necessary.

Mr. J. H. Cowley, of Callipers, Rickmansworth, has some Polecats which were caught at Wadesden and at Stoke Mandeville, in BUCKINGHAMSHIRE, in 1888 and 1889, which are tame enough to handle. He has crossed one with a Ferret, and reared a number of young ones which have turned out very good workers.

In the West of England it would seem that the Polecat is very nearly if not quite extinct. Of DEVONSHIRE, in 1883, Mr. D'Urban wrote:—"I very much fear that this animal has become extinct, if not in Devon, at any rate in the Exeter district. I have not seen one alive since 1852. The gamekeepers to whom I have spoken about it all say they have not met with one for a long time, and I have not seen any recently-killed ones hung up in the places where such trophies are usually suspended." Subsequently to the publication of this note (Zool. 1883, p. 25), Mr. D'Urban communicated some interesting statistics illustrating the gradual extinction of the Polecat in his county (Zool. 1884, p. 189). From these he concluded, "it seems only too probable that in North and East, perhaps also in South Devon, the Polecat is now extinct, but that a very few still linger in the extreme western portion of the county."

The last Polecat heard of in CORNWALL, where it is believed to be nearly exterminated, was one taken in March, 1890, in Upton Wood, Lewanick, in the eastern part of the county, as reported by Mr. F. R. Rodd (Zool. 1890, p. 134). In 1885, the late Mr. Thomas Cornish, of Penzance, wrote (Zool. 1885, p. 107) that one had been captured near Madron, about two

miles from Penzance, but he added that during the thirty-seven years in which he had been resident in West Cornwall he had never until then seen one alive or dead. It would appear, however, from a subsequent communication by Mr. A. H. Cocks (*tom. cit.* p. 145) that the Polecat is not quite so rare in Cornwall as Mr. Cornish supposed, for he himself had received a live one from Penzance a few years ago, and had heard of one being obtained in East Cornwall in 1880 on Col. Gryll's property at Lewarne, about five miles west of Liskeard.

In the Midlands the Polecat is reported to be now very rare. In LEICESTERSHIRE, for example, it is stated that none have been met with for many years (*Zool.* 1885, pp. 165, 166), although the Rev. A. Matthews, of Gumley, Market Harborough, writing in 1884, did not then consider it as uncommon in his neighbourhood (*Zool.* 1884, p. 271).

In OXFORDSHIRE, according to Mr. O. V. Aplin, it is very scarce towards the north of the county, where of late years only a few solitary ones have been met with; as at Adderbury, on the banks of the Sorbrook, in 1872; on Todmorton Heath in 1875; at Souldern in 1876; and at Banbury in 1880. In central Oxfordshire, where there are large woods, Polecats are rather more numerous. A taxidermist at Oxford, in Sept. 1885, had no less than eight sent to him for preservation, four of which were from the neighbourhood of Thame.

In NORTHAMPTONSHIRE, in October, 1883, a Polecat was killed near Aynhoe.

In WARWICKSHIRE, as Mr. O. V. Aplin informs me, an old ratcatcher, in 1883, stated that he had killed one at Farnborough seven years previously, but had seen none since; in 1882 a very fine old one was killed at Watergate in South Warwickshire.

In ESSEX, Dr. Laver, of Colchester, remembers it as being frequently met with, but states that it is now becoming very rare, and is in many districts already extinct (*Trans. Essex Field Club*, vol. ii. p. 167).

In SUFFOLK, according to Mr. G. T. Rope, the Polecat has been completely exterminated throughout the eastern part of the county, and in the west it is very nearly extinct. In March, 1888, one was caught at Mildenhall in a trap set for an Otter (*Zool.* 1888, p. 183).

Twenty years ago Mr. Thomas Southwell, of Norwich,

reported this animal as "by no means common in NORFOLK" (Trans. Norf. Nat. Soc. vol. i., 1870, p. 76), and referred to the observations made by the late Rev. H. T. Frere in the neighbourhood of Diss. Subsequently Mr. Frere himself communicated some notes on the subject to 'The Zoologist' (1888, p. 221), stating that in his boyhood (1849) the animal was far more common, and that at that time not a year passed without several being killed, especially in the autumn, when they made their way up from the fen to the dry land. "Matters are much altered now," he writes; "they are not extinct, but decidedly rare. From Rydon and Bressingham, where I knew them formerly, I hear that one is never seen now" (1888).

In LINCOLNSHIRE, Canon Fowler, in reporting the capture of a Polecat near Grantham (Zool. 1882, p. 230), expressed the opinion that the animal was becoming very rare in that district; but Mr. Cordeaux reports that it is still fairly common in those parts of the county where game is not preserved.

Messrs. Clarke and Roebuck, in YORKSHIRE, characterise it as "irregularly distributed, extremely rare, and fast becoming extinct; although half a century ago it was generally abundant."

When Messrs. Mennell and Perkins, in 1864, printed their Catalogue of the Mammalia of NORTHUMBERLAND and DURHAM, in vol. vi. of the Trans. Tyneside Nat. Field Club, they were able to write of the Polecat, "still plentiful in both counties," but a quarter of a century has since elapsed, and it may be far otherwise now. It would seem from all accounts, however, that at the present day in England the stronghold of the Polecat is in the north. From the Churchwardens' Accounts for the parish of Corbridge-on-Tyne, it appears that Polecats were at one time extremely abundant there; for there are frequent entries in the books of payments in reward for "fulmarts heads." The price paid for one was fourpence, and between the years 1677 and 1724 no less than 653 of these animals were destroyed in that parish alone.*

In CUMBERLAND,† WESTMORELAND, and N.E. LANCASHIRE, hunting the Polecat with hounds was at one time a very favourite sport, and is still practised to a limited extent. But it is a sport

* See 'The Zoologist,' 1881, p. 172.

† As to East Cumberland, see 'Zoologist,' 1881, p. 162.

sui generis; not, as in the case of fox or hare, pursued in broad daylight while the animal is just ahead of the hounds, but at early dawn when the Polecat, nocturnal in its habits, has travelled a considerable distance during the night, and is perhaps safe in his lair before the hounds are laid on.

Mr. Thomas Farrall, in reply to my enquiries some time since, sent the following account of Polecat hunting in Cumberland. It was published in 'The Field' of May 5th, 1883, and is the more interesting for the information it conveys on the subject of this animal's haunts and habits. He says:—

"Hunting the Polecat, or Fomart, has long been a favourite sport on the lowlands of Cumberland. Mr. Thomas Ruston, of Aspatria, an enthusiastic sportsman, has hunted this animal for nearly fifty years, and within that period packs of hounds for this particular branch of sport have been stationed at Ellenborough, Isell, Wigton, and Thrustonfield. The only pack now kept for the purpose is that owned by Mr. Joseph Langcake, of 'The Outgang,' Aspatria.

"Polecats may be hunted either by day or by moonlight, but William Barnes, who hunts Mr. Langcake's pack, prefers the latter. The hunting season commences with February, the chief months being March and April (the breeding season), and lasts until the meadows are well clothed with grass, and likely to sustain injury from the trampling of too ardent sportsmen. At this time of year, male Fomarts have been known to travel many miles in the course of a night, so that it is far more easy to drop upon one as he takes his 'walks abroad,' than to surprise him in his lair. On being pursued, he instinctively makes for his native ground, but, if hotly pressed, will, if possible, take refuge in any drain which chances to be in the immediate locality. Once *sub terra* he is very difficult to unearth. A little explanation is here needed. It must not be supposed that the Polecat enters a pipe which is discharging water. The run he takes is what is known as an old sod or stick drain, put down in the moss in the primitive days of agriculture; and the land having since been drained deeper with pipes or tiles, the original water-courses are left dry, and form famous places of refuge for any small animal which goes to ground. Thus the chances of killing in such a place are not very great.

"At a wayside inn near Maryport is a splendid case of stuffed Polecats killed by the Ellenborough hunt at intervals extending over a period of thirty years."

In 1883, at the date of Mr. Farrall's communication, Polecats were reported to be plentiful in the district embracing the sandy slopes of the Solway, the mosses of Abbey Holme, and the

adjoining waste known as Wedholme Flow. Here (he says) they breed and rear their young:—

“Nests are often found by the hunters when digging out an animal that has gone to ground. Scottish-like, they are made up of ‘but and ben;’ that is, they consist of two distinct parts—one made of leaves for the reception and rearing of the young, and the other serving as a storehouse for food. In the latter compartment have been found young rabbits, leverets, partridge chicks, ducklings, larks, frogs, and even eels. The frogs, though alive, were stunned by a puncture on the top of the head, and were thus in a half-unconscious state. In the spring of the year the poultry yards of the Abbey Holme farmers suffer much from the depredations of Fomarts. On two holdings at Plaskett Lands over sixty head of young poultry disappeared in a short space of time.

“The female Polecat generally selects her lair in the autumn, occupies it during the winter, and brings forth her young in it in the spring. She has usually four or five at a time, so that the species multiplies rapidly, notwithstanding that they are assiduously watched and trapped by local gamekeepers.

“In the early part of the season the hunters seek the Polecat on the banks of the open cuts, locally designated ‘sowes;’ later on they quest the fallow breaks and drier grounds. The usual time for ‘throwing off’ is 10 in the evening (by moonlight) and 3 to 4 in the morning (by daylight). The average length of a run is from three to five miles, but occasionally an old ‘varmint’ affords a chase of from eight to ten miles. An aged Polecat always dies game, being sure to make a spring and bite some of the dogs before he receives his *coup de grace*. One recently taken was very old, without a single tooth in either jaw, his coat ragged and poor, and his skin covered with ticks.

“In April, 1883, the Aspatia pack, consisting of otter-hounds and a quartet of terriers, had two splendid runs with what was believed to be the same Fomart, for he led them exactly over the same ground, a distance of seven miles. On April 21st they found him on the high land overlooking the village of West Newton, gave chase as far as Allonby, where he doubled and made a circuit by way of Cooper, and down into the meadows, then took refuge in a sod drain, and, as it was getting on towards midnight, the pack was called off, no attempt being made to unearth ‘the varmint.’”

Another correspondent, who desired that his name might be withheld, sent the following account of the sport as formerly practised in Lancashire:—

“You ask for information on the hunting of the Polecat, so I will venture to give you a short sketch of this kind of sport, as it was formerly

followed in the neighbourhood of Rochdale. It is now about twenty-five years since it was discontinued, and, though I was then too young to have actually taken part in the hunt myself, I well remember seeing the hounds at the time, and have often heard its glories described by the followers, many of whom are still living. The hounds were quite distinct from the modern harrier, but I have not sufficient knowledge to say of what breed they were, though they seemed to approach the old-fashioned pied white harrier type. They were about 18 in. or 20 in. in height, rather strongly built, with rough hair, long ears, wonderful nose, and gifted with deep mellow music. They did not possess much speed, nor was that considered a necessary qualification. [They were probably otter hounds.—ED.]

"Spring was the time for hunting the Foulmart, just after the close of hare-hunting. The animals were caught in a trap, generally placed close to a country well, and were turned out the night before it was intended to hunt them. A dog Foulmart would often show splendid sport, and I have heard of more than one run of eight miles as the crow flies, which is much farther than I ever knew a hare to go. On the other hand, the uncertainty of hunting was never more shown than with the Foulmart. Sometimes the run ended at the first fence; at another time the hounds would run all round a field, then across from side to side in a most tantalising manner. I have been assured that on one occasion the late Mr. Entwistle, of Foxholes, hunted one Foulmart for a whole week, bringing the hounds to the same spot the morning after where they had left off the evening before. The followers were never mounted. Capt. Hopwood, of Hopwood Hall, was wont to ride over from there to Newby, a distance of seven miles, and then put up his horse and follow the chase afoot."

Some additional facts of interest are contained in the following letter, dated 12th May, 1883, which carries the sport into North Wales, and shows how keenly it was pursued in the moorland country of North-East Lancashire and the Lake district:—

"Foulmart-hunting has for a length of time been carried on in a scratch way in Westmoreland, Lancashire, and other counties. Capt. Hopwood, of Hopwood, in Lancashire, achieved the greatest success in this branch of sport, and became the possessor of a fine pack of foulmart-hounds, unequalled for beauty, nose, and staunchness. It required great skill and time to bring them to perfection and make the pack free from riot (such as fox, otter, or sweetmart), and in this he thoroughly succeeded. None of his pack would own any scent but that of the Foulmart. They were of the same breed as the modern otter-hound, but superior in size and make to any I have seen in the different packs now existing. Capt. Hopwood chiefly hunted in the vale and moorland country of north-east Lancashire and in the Lake country of Lancashire and Westmoreland. In Wales, in

Merionethshire and Montgomeryshire he was able to follow the chase mounted, as were also his whips; but in Lancashire and the Lake country this was impracticable, owing to the boggy nature of the moors and steepness of the fells. To such perfection in nose and dash did he bring his hounds, that it was impossible for any one, except himself and the best Lancashire runners of the day, to keep at all on terms with them. He usually began hunting at daybreak, casting on till a drag was struck of a Foulmart, that had been travelling in the night. The length of the runs in the spring and early summer were extraordinary—often ten, fifteen, and over twenty miles, usually straight, and over a wild mountainous country. They generally ran the Foulmart to ground, and would often have another long run the next day, from the spot where they had marked and left him. To give an instance or two of the length of runs with the Foulmart, I will quote the following. In Wales they struck a drag on the left bank of Bala Lake, opposite Bala, and ran him into the country above Nannai, Sir Robert Vaughan's place, near Dolgelly—a real wild mountain run, without a single cast being made, and the distance at least twenty-two miles. In the Lake country I remember a run wonderful in length and the roughness of the country traversed. A drag was struck in the woods near Newby Bridge. They ran him through Graythwaite and Hawkshead, over the Braythy river, across Laughrigg Fell and the deep Rothay river, and killed him in the fells above Ambleside. This run must have been from eighteen to twenty miles in length. I could name several others, but space forbids. In conclusion, I may state that Capt. Hopwood never hunted at night—a course which is only taken for the purpose of killing the Foulmart, by hunting up to him while still travelling, giving him little or no chance of escape. Nor were the Foulmarts ever caught in traps, or turned out to hunt. The Captain only hunted on the strictest principles of wild and fair sport, and his pack will long be remembered in the counties over which he hunted."

It will be inferred from the foregoing statements that Foulmart is the common name for the Polecat in the North of England, as it is also in Scotland. In the South it is almost invariably called Polecat, except perhaps by north country keepers who have moved south, and who know it by its north country name.

The word "Polecat," says Bell ('British Quadrupeds,' 2nd ed. p. 206), is perhaps nothing more than "Polish cat." This I think most improbable, for the name is used by Chaucer. Prof. Skeat suggests "pool-cat," *i. e.* a cat living in a hole or burrow since the Gaelic *poll* and Cornish *pol* signifies a hole or pit, as well as a pool.

The past and present distribution of the Polecat in Scotland has been already so well traced by Mr. J. A. Harvie Brown (Zool.

1881, pp. 161—171), that it is unnecessary to go over the ground again. The result of his enquiries shows that in most of the Scottish counties the Polecat has become very much scarcer of late years, and that in many of them it is now extinct. He attributes this decrease, in a great measure, to the employment of steel or iron traps for the destruction of Rabbits, and remarks that, as a rule, the Polecat only survives where Rabbits do *not* abound and are *not* systematically trapped, and where Polecats consequently are obliged to subsist on other kinds of food.

In the 'Scottish Naturalist' for July, 1891, Mr. Robert Service has an interesting article on "The Old Fur Market of Dumfries," in which he shows the proportions in which skins of Hare, Rabbit, Otter, and Fomart were brought in for sale between the years 1816 and 1874, and the prices which were paid for them. In 1829 we find that 400 Fomarts were sold; in 1831, 600; in 1840, they were still "in considerable numbers;" in 1854, "getting scarce;" in 1858, "very scarce;" in 1866, a dozen only were brought in, since which time none have been forthcoming. The price varied as the skins became scarcer, from 12s. to 36s. per furriers' dozen, which meant twelve of the best full-sized skins, or a greater number of inferior ones; and in addition to skins received by the packmen (in exchange for goods) in all the parishes of Dumfriesshire and the Shire and Stewartry of Galloway, supplies were forwarded from other counties—Ayr, Lanark, Peebles, Selkirk, Roxburgh, Cumberland, and Northumberland. Fomart skins, or as they are called in the old Reports, "Fitches," were mostly manufactured into ladies' boas, and old wardrobes in Scotland still contain specimens. The fur market fell into decay when railways were completed, and commercial travellers, directly representing the great furriers of the South, began to collect the skins at the farmhouses instead of leaving the local pedlars and dealers to do so.

In Ireland, says Thompson (Nat. Hist. Irel., Mamm. p. 8), the Polecat is not positively known to exist, although said to inhabit the wild woods of Kerry. He received notes of the capture in several other counties of animals *supposed* to be of this species, but their identity was not satisfactorily proved. Two killed many years ago at Rosemount, Grey Abbey, Co. Down, seemed, from accurate description (says Thompson), to have been

Polecats; but it does not seem to have occurred to him that they might have been escaped Ferrets. The Polecat is not included in the late Prof. Leith Adams's "List of Recent and Extinct Irish Mammals" (Proc. Roy. Dubl. Soc. 1878, p. 41).

There can no longer be any doubt that the Polecat is the wild ancestor of the Ferret, notwithstanding that so many writers have concurred in describing the two as distinct species. There are positively no cranial, dental, or other structural characters by which they can be distinguished,* and the brown variety of the Ferret is so like a Polecat that it might well be mistaken for one. See the remarks of Mr. A. H. Cocks on this subject, 'Zoologist,' 1880, p. 396.

In regard to the early use of Ferrets, it may be remarked that they were employed by Genghis Khan in his imperial hunting circle at Termed in 1221,† and are mentioned by the Emperor Frederick II. of Germany as animals used for hunting in 1245.‡ They were doubtless introduced into England by the Romans, to whom we are also indebted for the Pheasant and the Fallow-deer.

In Richard the Second's time, 1390, a statute was passed prohibiting any one from keeping or using greyhounds and *fyrets* who had not lands or tenements of the annual value of 40s. (See 'Zoologist,' 1888, p. 20.) Both the *fychew* and the *fyret* are mentioned in 'Thystorye of Reynard the Foxe,' as printed by Caxton in 1481 (ed. Percy Society, p. 109).

The use of Ferrets and nets for taking rabbits in Cumberland in 1621 is clearly indicated by entries in the 'Household Book' of Lord William Howard, of Naworth. Thus:—

"Tho. Warriner Feb. 4. A wallet for the ferrets viij d. Corde viij d. An yron for his staffe xiiij d. A hanck of yarn for mending his net vj d."

Again, under date 1624, July 16:—

"For ferrets bought at Broham by the Warriner iij s. viij d."; and 1633, March 18:—

"For seven firets bought of Tho. the Warriner, x s."

With regard to the homing instinct in Ferrets, see 'The Field,' 1873, Jan. 25, Feb. 1, and Feb. 8; and 1886, Jan. 23 and 30.

* See 'The Field,' 3rd Feb. 1872.

† Ranking, 'Historical Researches on the Sports of the Mongols and Romans,' 1826, p. 33.

‡ 'De Arte Venandi,' ed. Schneider, 1788, i. p. 3.

As to the habits of the Polecat, I do not propose to repeat statements that may be found in Bell's 'British Quadrupeds,' for I take it for granted that a copy of this book is in the hands of every reader of 'The Zoologist.' For this reason, also, I omit a detailed description of the animal, which is so similar in size, shape, and colour to a brown Ferret, that every one must be familiar with its appearance.

But I may mention a few points which Bell has overlooked, and perhaps supplement others with additional information. First, with regard to the period of gestation. Bell tells us (p. 206) that the female brings forth from four to six young, in May or June; but says nothing about the gestation, nor about the condition of the young at birth. The period, as has been ascertained by breeding in confinement, is six weeks. The young are born blind, and do not open their eyes for a month.

In regard to food, several instances have come to my knowledge which show the Polecat's partiality for frogs and fish, especially eels. It is doubtless well known that eels slide over the dewy grass in the early morning on their way from one water to another, and thus get caught *en route* by the Polecat.

I do not remember any reported instance of a Polecat being seen in the water in pursuit of eels or other fish, although many observers have testified to the fact of fish remains being discovered in the animal's lair. But as I have many times seen Stoats and Weasels swim, I see no reason to doubt that Polecats are equally clever in the water, while the frequent discovery of fish-bones in their haunts suggests that they are really much more aquatic in their habits than their smaller relatives.*

Just as Stoats and Weasels, which sometimes hunt in packs, have been known to attack men and dogs,† so have Polecats occasionally been known to do the same.‡

On the other hand, Polecats are easily tamed if not hurt when they are caught, in which case handling makes them spiteful

* Mr. J. H. B. Cowley, of Callipers, Rickmansworth, informs me that he has seen a half-bred Polecat swim across a stream where a rat had just crossed.

† E. T. Booth, 'The Field,' 6th Oct. 1883; 'The Gamekeeper at Home,' p. 121, 2nd. ed.; and W. Shand, 'The Field,' 25th July, 1891.

‡ 'The Naturalist,' 1854, vol. iv. p. 95; and John Colquhoun, 'Ferae Naturæ of the British Islands,' 1873, p. 13.

when touched. They have little or no smell, *unless irritated*, when, like the Weasel and Stoat, they can emit a very strong odour. They are easily kept in health if fed on bread and milk, with a good supply of rats, mice, small birds, and frogs.

Mr. Cowley, who has two live Polecats at the present time, tells me that a freshly killed dead cat is a great delicacy to them, as it is to Ferrets, particularly when they get low in condition, and pulls them up sooner than anything. If allowed to get too low, he says, they get foot-rot, even though kept scrupulously clean, and this disease is not always confined to the feet, but appears like a fungoid growth on the ears, tail, and other parts of the body. If taken in time, however, it may be readily cured by a dressing of oil of tar, after paring away the excrescences.

Mr. Cowley writes :—

"The two Polecats I now have are both males and live together. They have both bred with Ferrets, which I believe are only domesticated Polecats, the white ones being albinos and sports of nature. They improve the breed of ordinary Ferrets by making them stronger in constitution, and by making them work quicker and longer than ordinary Ferrets, which get lazy and slow after they are two years old. They want more handling and more work when growing than ordinary Ferrets do, or they get shy of being picked up. The second cross is perhaps the best for general purposes, although the first cross are capital rat-workers round stacks where agility is wanted. I have seen a half-bred Polecat swim across a stream where a rat had just crossed, a thing I never saw an ordinary Ferret do.

"One thing I never could make out, and this is a point which might interest readers of 'The Zoologist,' namely, what does a wild Stoat or Polecat do when badly bitten by rats? All ratcatchers know to their cost how many Ferrets die from being badly bitten in the head. It festers and swells, and in a few days often proves fatal. I very seldom lose one now, however, for I find that carbolic oil brushed over the wound soon heals it. But what can a wild animal do? It must get bitten sometimes, though I must say I never saw a Stoat or Weasel with any bad scars. — Have they any means of curing themselves by rubbing against any plant, or how do you account for their immunity? They often kill full-grown rats, we know."

Their greater activity probably enables them to avoid attack. Bellamy states in his 'Natural History of South Devon' (p. 194) that a white variety of the Polecat, taken at Marley, South Devon, was in the possession of Mr. G. Leach, but this may have been an escaped Ferret. I never saw or heard of a

truly wild white Polecat, although I have seen a pure white Stoat (which had not even the usual black tip to the tail), and also a pure white Weasel.

In 'The Zoologist' for 1878 (p. 55), a curious case of hydrophobia resulting from the bite of a wild Polecat is quoted by Mr. Southwell from the Journal of Robert Marsham, of Stratton Strawless, the friend and correspondent of Gilbert White.

ON THE COMMON WREN OF THE SHETLAND ISLANDS.

By HENRY SEEBOHM.

Mr. Richard M. Barrington has sent me four examples of a species of Wren from the Shetland Islands, with the request that I would examine them, and give the readers of 'The Zoologist' what information I could respecting them. This I have great pleasure in doing.

I may premise, that in the colour of the upper parts the various species of Wrens in Europe and Asia completely intergrade. It is impossible to draw a hard and fast line at any point between the palest desert forms from Algeria or Turkestan, and the darkest tropical forms from the Himalayas. The tropical forms appear to be more distinctly barred on the upper parts than is usual in temperate regions; but some examples from France and Norway equal them in this respect. In the colour of the under parts there does, however, seem to be a gap between the dark birds of India, China and Japan, and the paler birds of Europe and Western Asia.

The Common Wren, *Troglodytes parvulus*, appears to be confined to the Western Palæarctic Region. It varies in three directions,—in dimensions, in colour, and in the amount of barring across the feathers. The Faroese race is the largest and the most barred, and is fairly entitled to be regarded as sub-specifically distinct under the name of *Troglodytes parvulus borealis*. The Shetland race only differs from it in probably being, on an average, intermediate in size between it and the typical form. In Algeria in the west, and in Turkestan in the east, the palest and least rufous examples are found, which are known as *Troglodytes parvulus pallidus*. On St. Kilda a fourth

form occurs which is as conspicuously barred as the Faroese and Shetland race, and which is intermediate between them in size, whilst it scarcely differs from the Algerian and Turkestan race in colour, and may fairly be regarded as subspecifically distinct under the name of *Troglodytes parvulus hirtensis*.

The typical form of the Common Wren varies in length of wing from 1·7 to 2·0 inches. Out of ten examples two measure 1·85, whilst four are larger and four are smaller, so that the mean between the two extremes appears to represent a fair average. The length of tail varies from 1·1 to 1·37 inches, the average of the ten examples being 1·22. The length of the culmen varies from ·45 to ·56 inches, the average of the ten examples being ·515. The length of the hallux, without the claw, varies from ·34 to ·40, the average being ·37.

The range of variation appears to be as nearly as possible ten per cent. from the mean in each direction; the mean being, wing 1·85, tail 1·22, culmen ·51, and hallux ·37. Although the number of examples that have been measured from the Shetland Islands, St. Kilda, and the Faroe Islands is scarcely sufficient to establish an average, there can be little doubt that the average size of these three races is greater than that of the typical race; and there is no doubt whatever that the maximum dimensions exceed those of the typical race.

Four examples of the Shetland Island race of the Common Wren vary in length of wing from 1·81 to 1·96, in length of tail from 1·11 to 1·22, in length of culmen from ·56 to ·6, and in length of hallux, without the claw, from ·4 to ·43; the mean being, wing 1·91, tail 1·18, culmen ·58, hallux ·41.

Three examples of the Faroese race of the Common Wren vary in length of wing from 1·95 to 2·15, in length of tail from 1·36 to 1·5, in length of culmen from ·58 to ·62, and in length of hallux, without the claw, from ·41 to ·43.

It thus appears that whilst the Shetland form of the Common Wren is on an average a larger bird than the typical form, but is not quite so large on an average as the Faroese form, it nevertheless intergrades with both, so that none of the European forms can claim more than subspecific rank on the ground of size.

The typical form of the Common Wren also varies considerably in the robustness of its feet. They are generally very slender, but occasionally examples are found in which they are

comparatively stout and clumsy. In examples from the Shetland Islands and from St. Kilda, robust feet appear to be the rule and slender feet the exception; whilst so far as is known the Faroe Island race always has robust feet.

The Common Wren only moults once a year, in autumn. When newly moulted the colour is very rufous, almost coffee-coloured; but before the end of the summer the brilliancy of the colour is lessened by wear and tear, and the more or less faded and dirty coffee-colour looks slightly browner and greyer. The abrasion of the feathers, and probably also some direct accession of colour in spring, causes the bars across the lower back and the under parts to become more distinct than they are in newly moulted birds, but it is very unusual to find more than obscure traces of bars, even in the most abraded examples, on the upper back or breast.

The insular races of the Common Wren are of course subject to the same seasonal variation of colour as the typical form, but in summer plumage (and probably also in autumn dress) the bars across both the upper and under parts are very much more conspicuous than they are in the most pronounced examples of the typical form, and they extend to the upper back and breast, which is very rarely the case in the typical form.

There is also a marked difference in the general colour of the various races. I have not seen recently moulted examples of the insular races, but in comparison with the faded coffee-brown of the summer plumage of the typical form, the Shetland and Faroe races may be described as sooty-brown, and the St. Kilda race as greyish-brown on the upper parts.

Until a series of recently moulted autumn examples of the insular races have been obtained, it is impossible to say whether any of the European races of the Common Wren ought to be regarded as specifically distinct from the typical form; but there can be no doubt that there are three or four subspecific forms that must be recognized in some way, and I cannot see any better way than that of calling the typical race *Troglodytes parvulus*, the desert race in Algeria and Turkestan *T. parvulus pallidus*, the St. Kilda race *T. parvulus hirtensis*, and the Shetland and Faroe race *T. parvulus borealis*.

An example from the Skellig Rocks, on the south-west coast of Ireland, and one from the outer Hebrides, both belong to the

typical form, but Mr. Barrington informs me that he has seen examples from Iceland, in the Copenhagen Museum, which appeared to him to be larger than the Shetland race.

The average size of the eggs of the Faroese Wren is greater than those of the typical form. A clutch of five eggs of the former in my collection weighs as much as a clutch of seven of the latter.

NOTES ON THE BIRDS OF DONEGAL.

By HENRY CHICHESTER HART, B.A., F.L.S.

THE following notes form a summary of many years' observations, chiefly taken in the summer half of the year in the Co. Donegal. For the last few years, however, I have resided in the county during the greater part of the winter. I have quoted from a paper, printed in the 'Magazine of Natural History,' in the year 1832 (vol. v. p. 580), by Mr. J. V. Stewart, of Ards, who made a considerable collection of birds in this county. From Mr. A. G. More's 'List of Irish Birds' I have also made extracts, and I have to thank the latter author for some further notes which I should have otherwise overlooked. From the 'Report on the Migration of Birds (Ireland),' by Mr. R. Barrington, I have obtained some information, while Thompson's 'Birds of Ireland' has of course been referred to, as well as Sir R. Payne Gallwey's 'Fowler in Ireland' for the aquatic species. But the bulk of the observations are my own, well supplemented by the notes and remarks of my friend Mr. Arthur Brooke, of Killybegs. The species that breed in Donegal are marked with an asterisk (*).

*GOLDEN EAGLE, *Aquila chrysaëtus*, Linn.—Breeds annually on one mountain, on the west coast of Donegal, though other former breeding-places in this county are now deserted. I saw a Golden Eagle near the summit of Errigal in June, 1888. One was shot by Lord Leitrim's keeper on Lough Salt Mountain in the summer of 1890. I have a Golden Eagle's egg taken in the Poisoned Glen, Dunlewy, about forty years ago. My friend Mr. Arthur Brooke,† of Killybegs, obtained two young birds

† I am indebted to this gentleman for a series of notes which he very kindly put together at my request, and which are here distinguished by his initials.

from the eyrie alluded to in 1887, which are still living in confinement. In 1890 two others were reared at the same breeding-place. In this neighbourhood three Golden Eagles have been trapped in the last twenty-four years.

*WHITE-TAILED EAGLE, *Haliaëtus albicilla*, Linn.—Formerly common in the district where I live (Fanet), but I have not seen one for nearly twenty years, when I saw two on Slieve League. It is not so long as that, however, since this species was to be found at Horn Head, where, of recent years, like the last-named, it has been exterminated by the owner, Mr. C. Stewart. "Major Hamilton, of Brown Hall, has a stuffed White-tailed Eagle, which he shot near Finntown in 1849" (A. B.). Sea Eagles bred at Malin Head thirty years ago. A man used to rob the nest of hares, lambs, &c., brought to the young ones, which were cruelly rendered incapable of availing themselves of the food which the old ones brought. Mr. J. V. Stewart wrote of the White-tailed Eagle as very common about Ards in 1828.

*PEREGRINE FALCON, *Falco peregrinus*, Gmelin.—Breeds in many places in the county. I have noted the following:—Dunaff Head; the Bin, Fanet; Rossgull; Horn Head; Tory Island; Aranmore Island; Breaghy Head; island outside Bunbeg, near Gweedore; Knockalla, Fanet; Slieve League; Melmore. I have seen the birds at their breeding-places during the last ten or fifteen years, and the species does not appear to be decreasing. As it is a migrant, and absent when gunners are abroad, it escapes better than other birds of prey. The Peregrine is usually at war with the Raven during the breeding season, driving it from too near an approach to its nest. But the latter often holds its own breeding-place in the same range of cliffs, and is by no means a vanquished foe. "Breeds also on Tor More and at Lough Belshade; the former on the coast near Glen Head, and the latter in the mountains above Lough Eske" (A. B.). No doubt there are several other breeding-places. Mr. Stewart called the Peregrine "rare" in his time (1836).

GREENLAND FALCON, *F. candicans*, Gmel.—One was obtained near Greencastle in Innishowen, by Mr. Leake in 1877; another in 1884, on the west coast of Donegal ('Report on Migration of Birds,' R. M. B.).

ICELAND FALCON, *F. islandicus*, Gmel.—Mr. Longworth caught one alive at Glenmore, in the Finn Valley, in 1883.

[SPOTTED EAGLE, *Aquila navia*, Gmel.—One mentioned by Thompson, was obtained at Horn Head. Probably a mistake.]

*MERLIN, *F. aesalon*, Gmel.—Met with, but sparingly, on the moors throughout the county. It breeds, I believe, both at Glenalla and Carrablagh, though I have not found the nest. At the latter place, however, in early summer, I have seen Merlins striking down Yellowhammers and Titlarks after most interesting flights. The Merlin is by no means uncommon in the south-west of the county. Breeds on the moors near Lough Divna, to the north of Carrick. Eggs have been taken near Pettigo by Sir John Leslie's keeper.

*KESTREL, *F. tinnunculus*, Linn.—Breeds in the sea-cliffs in many places, but rare, or absent, in winter.

*SPARROWHAWK, *Accipiter nisus*, Linn.—Commoner than the last-named, and resident throughout the year.

COMMON BUZZARD, *Buteo vulgaris*, Leach.—About Donegal, and between that and Ballyshannon, in the summer of 1883, I saw several of these birds. At Glenalla, till about 1880, I used to see them annually in summer, but recently I have seldom observed them. In 1883 I saw several Buzzards on the Mourne Mountains, in the Co. Down. Mr. Stewart, in 1830, described the Buzzard as "common and resident."

HEN HARRIER, *Circus cyaneus*, Linn.—I have only once seen this bird in Donegal—one in June, 1888—on the moor above Dunlewy, near Gweedore.

SNOWY OWL, *Nyctea nivea*, Daudin.—One, a female bird in the second year's plumage, was obtained by the light-keeper on Innistrahull, off Malin Head, on Nov. 19th, 1882. It is preserved in the National Museum, Dublin.

EAGLE OWL, *Strix bubo*, Linn.—About sixty years ago an Eagle Owl was captured alive in a potato-field at Glenalla, and kept in confinement some days. This circumstance has often been narrated to me by my father and uncle who then lived there as young people. My aunt, who was a very accurate old lady, had a distinct recollection of the tall, upright ear-tufts. The late Mr. J. V. Stewart, of Ards, stated that four of the "Great Eared Owl, *S. bubo*," visited his neighbourhood in 1820—1830 in a storm from the north. From the circumstance of their coming with a snow-storm from the north, Mr. More believes them to have been Snowy Owls. But Mr. Stewart, in 1832, distinctly

referred to the "Great Eared Owl," and he was an excellent ornithologist.

*WHITE OR BARN OWL, *Strix flammea*, Linn.; *LONG-EARED OWL, *Otus vulgaris*, Flem.—Both these species are resident, and breed at Glenalla and elsewhere.

SHORT-EARED OWL, *Otus brachyotus*, Forster.—Mr. Arthur Brooke informs me that he has twice shot this Owl on snipe-ground in the marsh at St. John's Point, near Killybegs, where it appears annually, and is known as the "Woodcock Owl," from the time of its arrival. One was shot near Carrablagh by a local fowler two years ago (1889), and he informed me that they arrive there annually at the end of October.

*SPOTTED FLYCATCHER, *Muscicapa grisola*, Linn.—Apparently not a common visitor, but I have seen pairs at Fahan (1881), and at Glenalla several times. "A pair bred for two or three years in succession in the trellis against the White House (Killybegs) about twenty years ago. Since then I never saw one here till this year (1889), when a pair brought out their young in the same trellis, about five yards from the same spot. Another pair bred in the garden at Bonny Glen, Inver" (A. B.).

GREAT GREY SHRIKE, *Lanius excubitor*, Linn.—Mr. Brooke writes:—"Archdeacon Cox tells me that about twelve years ago a man named Bold, an ex-gauger, who lived near Dunglow, gave him a specimen of the Butcher-bird, or Great Grey Shrike, obtained in that locality, and that he had sent it to the Natural History Society, Dublin."

GOLDEN ORIOLE, *Oriolus galbula*, Linn.—In 1881 Archdeacon Cox obtained one near Glenties, a female bird. Another was obtained some twenty-five years ago at Salt Hill, near Mount Charles, and was preserved by the Russell family, then living there.

*DIPPER, *Cinclus aquaticus*, Bechstein.—Not unfrequent, and breeding by mountain streams throughout Donegal. Mr. Brooke regards it as "Common all through south-west Donegal, and one of the earliest breeders we have. He has obtained the eggs at the end of March."

*MISTLE THRUSH, *Turdus viscivorus*, Linn.—Common at all seasons, and occurring throughout the winter more freely than than the other resident Thrushes. In the neighbourhood of Killybegs, owing no doubt to the scarcity of trees, Mr. Brooke has

found Mistle Thrushes' nests in strange places, as on the ground in shelter of a rock, on the top of an espalier by a frequented garden-path, and in a pear tree against a garden-wall. In the latter position it was destroyed by the gardener, but the birds rebuilt their nest in the same spot, with the addition of a piece of muslin, as if to direct attention to it. The second brood was unmolested. Another nest, placed in a tree, was destroyed by Rooks as fast as it was built, and finally the Thrushes gave it up in despair (A. B.). These birds appear to me to be more abundant in Ireland than they were ten to twenty years ago—and more audacious. Thompson states that the first Mistle Thrush's nest known in the North of Ireland was found in 1808.

*SONG THRUSH, *T. musicus*, Linn.—Common in the breeding season, but deserts us at Carrablagh when this is over.

REDWING, *T. iliacus*, Linn.—Never an abundant winter visitor, except perhaps in a hard season.

*BLACKBIRD, *T. merula*, Linn.—Common, and abundant throughout the year. "A pair brought out two broods in succession in the same nest, in a holly-bush in my garden, the year before last" (A. B.).

*RING OUZEL, *T. torquatus*, Linn.—These birds breed in scattered localities in lonely mountain glens throughout the county. By no means rare. In this district they breed at Knockalla, Glenalla, Auchterlinn, and Lough Salt, &c. In September and October they appear in small flocks, usually less than a dozen, and frequent rocky places about the mountain tops before leaving for the winter. "Very common during the breeding season in all the mountains of S.W. Donegal" (A. B.).

FIELDFARE, *T. pilaris*, Linn.—Apparently a commoner winter visitor to Carrablagh than the Redwing. In 1890 one was seen as early as October 13th.

*HEDGESPARROW, *Accentor modularis*, Linn.—Not unfrequent throughout the year, but much commoner in summer.

*REDBREAST, *Erythacus rubecula*, Linn.—The commonest resident, one season with another, at Carrablagh.

BLACK REDSTART, *Ruticilla titys*, Scopoli.—In 1881 one was seen at Greencastle, Innishowen, by the same observer who obtained the Greenland Falcon above mentioned.

*STONECHAT, *Saxicola rubicola*, Linn.—Frequent. Small numbers remain through the winter.

*WHINCHAT, *S. rubetra*, Linn.—Very local. In 1880 I saw two pairs about Trawenagh Bay, near Dunglow, in the N.W. corner of Donegal, and in 1886 I met with a pair by the river Termon, a mile or two above Pettigo, during the summer. Never seen about Fanet. The Whinchat utters a clear Chaffinch-like whistle before its chatter, and the chatter is much weaker than that of the Stonechat.

*WHEATEAR, *S. œnanthe*, Linn.—A common summer visitor, arriving in the beginning of April and remaining till the end of September. "Very common during the breeding season in every part of S.W. Donegal. I once took a nest with six eggs out of a rabbit-hole on Rathlin O'Beirne Island, and saw one of these birds so late as Oct. 7th, 1880. The first I ever saw was on April 4th, 1880" (A. B.).

*SEGE WARBLER, *Acrocephalus schœnobæus*, Linn.—Kindrum, Lough Fern, River Finn, River Erne, are haunts of the Sedge Warbler, and no doubt other places. But it is not a common visitor, owing to the absence of suitable haunts. Mr. Brooke has found two nests within a mile of Killybegs.

BLACKCAP, *Sylvia atricapilla*, Linn.—Very rare in Donegal. At the end of May, 1881, a pair frequented the plantation behind the garden of Rathmullan House, Lough Swilly.

*WHITETHROAT, *S. rufa*, Boddaert. — Not unfrequent in many parts of the county in summer, but visits Fanet sparingly. "Common during the breeding season about Killybegs, and returning to breed in the same place, if not disturbed" (A. B.).

WOOD WREN, *Phylloscopus sibilatrix*, Bechstein.—A very rare visitor. One shot by me at Glenalla, in June, 1879, is now in the National Museum in Dublin. There were two pairs there on that occasion, and I had heard them at Glenalla in previous years, but I have never met with the species elsewhere in Donegal. (See Zool. 1879, p. 341.)

*WILLOW WREN, *P. trochilus*, Linn.—A common summer visitor. Rarely sings a second time in September at Glenalla, where it arrives nearly a week later than the Chiffchaff.

*CHIFFCHAFF, *P. rufus*, Bechst.—As common as the last, or more so, in woodland places like Glenalla. The Chiffchaff seldom frequents open hedgerows as the Willow Wren does. It may usually be heard at Glenalla, giving a second song,

on fine days at the beginning of September. It generally arrives the second week of April at Glenalla.

*GOLDEN-CRESTED WREN, *Regulus cristatus*, Koch.—Resident and common wherever there are spruces or silver firs.

*COMMON WREN, *Troglodytes parvulus*, Koch.—Common and resident. Often met with in summer in most remote places on steep mountain cliffs. I may quote Slieve League and Bluestack in this county, and Brandon in Kerry, on the sea-precipices, in both of which lonely places I disturbed these birds, which are usually found dwelling near houses.

*TREE CREEPER, *Certhia familiaris*, Linn.—Apparently very scarce in Donegal, though ascertained to occur in Letterkenny. I have seen it at Ards, on the shores of Sheephaven Bay, where there is a sufficiency of timber. The nest has been taken at Marble Hill, I have been informed, by the Rev. A. Stuart, or one of his sons. Mr. J. V. Stewart wrote (1830) that it was a very rare resident at Ards.

*GREATER TIT, *Parus major*, Linn.—Frequent in summer; scattered and of uncertain distribution in winter.

*BLUE TIT, *P. cæruleus*, Linn.—Common and resident.

*COAL TIT, *P. ater*, Linn.—Not quite so common as either of the last-named species, but frequent at Glenalla, Rathmullan, &c. "Not uncommon at Killybegs" (A. B.).

*LONG-TAILED TIT, *Acredula caudata*, Linn.—Not rare, and occurs in small travelling parties in winter. I have found their nests at Glenalla and Rathmullan. "Are to be seen at this season of the year (January), in flocks up to a dozen or so, about the woods at Lough Eske and Ardnamona, where they breed" (A. B.).

MARSH TIT, *Parus palustris*, Linn.—I saw one at Carrablagh in November, 1889, and I observed it carefully: there was no white on the nape. This bird appears to be very rare in Ireland.

WAXWING, *Ampelis garrulus*, Linn.—Mr. Murphy, of Dunfanaghy, obtained a specimen of this rare winter visitor in that neighbourhood in 1881 (A. B.).

(To be continued.)

NOTES AND QUERIES.

MAMMALIA.

The Marten in Co. Down.—Mr. Sheals, the taxidermist, of Belfast, reports that a large male Marten, *Martes sylvatica*, Nils., was trapped by Major Maxwell's keeper at Finnebrogue, Downpatrick, on the 4th April last. No doubt the keeper was rejoiced, but naturalists will hear of the occurrence with regret. This beautiful animal, once so great an ornament in all our large woods, even in the South of England, is—like the Wolf of old—being gradually driven northward and westward into the wilder parts of the country, where it is becoming gradually exterminated.—J. E. HARTING.

Note on the Water Vole.—To what extent does the Water Vole hibernate? My attention has been drawn to this question by the following facts:—In mild winters Voles are not at all uncommonly seen along our streams all the season. In spells of sharp weather, when the ground is covered with snow, their tracks and other marks of their presence are often seen on the banks. Last spring and summer Water Voles were exceptionally abundant along a stretch of the Swere in this and the next parish. In spring they were wonderfully tame, and would sit on the opposite bank in full view until almost touched with the point of a fishing-rod. In summer evenings, as I walked up the stream, they plumped off the banks every few yards. On the same water there are hardly any this summer. One evening last week I walked along four meadows without seeing a single Vole. The only solution seems to be that the late hard winter has killed them nearly all.—O. V. APLIN (Bloxham, Oxon).

Irish Localities for Natterer's Bat.—In an editorial foot-note (p. 271), it is suggested that my friend Mr. Hart and I have overlooked several known Irish localities for this bat. But, as I still believe that only four localities, and only one specimen from each, can as yet be reckoned in Ireland, I hope a few words of explanation may not be out of place. Mr. Mangan's locality of Enniskerry (Nat. Hist. Soc. Dublin, 1844) refers, no doubt, to the same specimen which is recorded by Mr. M'Coy (A. N. H. xv. p. 270) as having been obtained at "the Scalp," which lies close to Enniskerry, and is just on the border where the counties of Wicklow and Dublin meet. My friend Mr. Barrington gives this locality to Wicklow; Thompson says "near Dublin," and Bell correctly gives it as "a rugged pass between the counties of Dublin and Wicklow;" all these refer to the same original specimen, which may, accordingly, be credited to either county. "Kildare and Queen's County" refer to the bats taken by the late Dr. J. R. Kinahan at Tankardstown Bridge, which is on the borders of these two counties. These bats were at first announced as *V. Nattereri*,

but afterwards were found to belong to *V. Daubentonii*, a mistake which was corrected by Dr. Kinahan himself, as mentioned by Mr. Kelsall (Zool. 1889, p. 309). This leaves one at "the Scalp," one in County Cork (Zool. 1883, p. 294), one taken in County Longford and now in the British Museum (Zool. 1889, p. 248), and now a fourth in Donegal; and it is curious that only a single example has been taken in of each these four localities.—A. G. MORE (74, Leinster Road, Dublin).

The Noctule and Serotine Bats in Kent.—Having read the admirable paper on the Serotine Bat, *Vesperugo serotinus*, in 'The Zoologist' (pp. 201—205), I am prompted to give you the result of my observations on this and the Noctule Bat in Kent. As both these bats are abundant here, and I have kept them under observation during the last four or five years, I write with the greater confidence. True to their former habits, the Noctules appeared from the gable of my house this year in their former abundance and at their usual season. On May 1st, when I first observed them, I counted fourteen emerge from their winter quarters at 8 p.m.; but the weather following this evening not being propitious, I did not observe them again until June 4th, on which night I counted sixty-seven as they issued from the gable of the house at 8.15 p.m. On June 12th, at 8 p.m., 120 emerged from the same place: since then they appeared in decreasing numbers. I cannot make out exactly what weather they prefer, for on that evening it was clear and cold; while on the 16th, it being cloudy and mild, thirty-one bats came out at 7.50 p.m., and I waited in vain till 8.30 expecting others to appear. A few days later I watched for them, and but one appeared; however, they had not then all left the neighbourhood, for on June 28th I saw four or five at 8.30 p.m., flying very high. In previous years they deserted my house at about the same time of the year, and I am convinced they migrate somewhere, for they are not seen in July or August, except a few during the early part of July. I imagine the Noctules roost in the tall trees, now well out in foliage, but the greater part of them disappear from the neighbourhood. When frequenting the house they return about 9 p.m., and when many are out they may be seen flying round like a swarm of bees, waiting their opportunity to retire into the hole from which they emerged. Another curious circumstance I may relate: although I have watched them most closely as they appeared from the house, I never could detect the least difference in their size, or see any that looked like young ones. When and where they breed is to me a mystery. The Noctules generally seem very fat, notwithstanding their having such short feeding hours. While frequenting the house they are generally infested with parasites, and our people are glad to see them depart. With regard to the Serotine Bat, *Vesperugo serotinus*, although it is never so abundant here as the Noctule, there are generally five or six to be seen during the summer months in and about my garden. They come out sooner in the

year than the Noctules, and are to be seen at times during the whole summer. Although their appearance on the wing is similar, as you justly observe, the proximity in size and their appearance together has doubtless on many occasions caused the two species to be confounded. To the attentive observer the two species may be readily distinguished. According to my observation, the Serotine never flies at such a height as the Noctule. It is much less rapid in its flight, and its general habit is to hawk about trees and lanes; it sometimes doubles down nearly to the ground, and flies so low that you might strike it down with a whip. I believe the Rev. A. C. Bury must have been mistaken when he wrote of the Serotine the statement quoted in your article (p. 203), wherein he remarked, "As the night got on, they flew higher, and between 9.30 and 9.45 they flew altogether out of gunshot in height." In this case it was probably the Noctules observed out of gunshot. I have watched the Serotine to try to find some corroboration of this, but in every case I have found that it rarely flies higher than the tops of the trees in this neighbourhood, while the Noctule's flight is at a much greater height. The Serotine is often found in pairs hunting in the same neighbourhood. On June 28th I watched them till nearly dark, and the Noctules were abroad at the same time, so that I could easily compare them. The Noctule flies with a more curved and pointed wing, taking a long range, and appearing in the distance something like a Snipe in the air.—GEORGE DOWKER (Stourmouth, Wingham, Kent).

CETACEA.

Sibbald's Rorqual on the Irish Coast.—The following particulars respecting the first recorded instance of Sibbald's Rorqual (*Balænoptera sibbaldii*, J. E. Gray) on the coast of Ireland, may be acceptable as supplementary to those given by Mr. Crouch (p. 215). About the end of March Mr. A. G. More drew my attention to several notices in the daily papers of the stranding of a large whale at the mouth of Wexford Harbour. One of these notices, which appeared in the 'Evening Telegraph,' ran as follows:—"On Wednesday [March 25th] Edward Wickham, a fisherman, living at the Fort, at the entrance to the harbour, had his attention attracted to an unusual disturbance in the sea just opposite Hantoons, below the Fort. He made out the back and fins of a huge Whale rolling and beating the waves in a struggle apparently to get off the sand-bank, which makes the sea there quite shallow. The pilots at the Fort station also perceived the struggle, and they and Wickham continued to watch the strange animal during the day, and pilots Blake and Saunders and Wickham subsequently put off in a boat with the object of getting a closer inspection, but they did not care to venture too near. On the following morning, however, Wickham ventured to approach in his boat, the struggles of the big whale having become less and less. He managed to get close enough to plunge

a long knife into it under one of the side fins, which had the result of ending its troubles. The Board of Trade has been communicated with, with a view to having the unwieldy carcase removed. It is now lying just in front of the harbour. There is no doubt that this strange visitor, coming quite unintentionally into shallow water, grounded on the Swanton Bank." On reading this report I at once wrote to several friends in Wexford for further particulars, with the result that Mr. E. A. Gibbon very kindly secured for me a small piece of the baleen. This I forwarded to Mr. More, who when he saw it at once said that it belonged to a specimen of Sibbald's Rorqual. Unfortunately I was unable to visit the whale until after the blubber and some of the bones had been removed, but the Wexford papers kept their readers informed as to what became of it. On April 3rd it was sold by auction by Mr. Plowman, Receiver of Wreck, and was knocked down for £111 to Mr. William Armstrong, of Wexford, who has kindly given me some interesting particulars regarding the dimensions and colour at the time of his purchase. He tells me that its total length was about 82 feet. The colour was black above and dark slate-colour beneath, with patches rather tending to grey. The upper surface of the flippers was black, the under surface greenish white; their length was $10\frac{1}{2}$ ft., their breadth about 30 in. The dorsal fin was 11 in. high and 28 in. long; its posterior edge was 16 ft. from the division of the tail. The tail measured 16 ft. across its outer edge. The baleen, of which 500 blades were taken out of the mouth, was uniformly black. These blades were fringed at their ends and curved at their sides, and measured from 12 to 29 in. in length, and from 9 to 22 in. in width at their widest part. Those which were near the apex of the jaws were smaller, more numerous, and upright. All were imbedded in the roof of the mouth to a depth of about 4 in. A series of longitudinal folds of skin about 2 in. wide ran from head to belly, with a space between each stripe of 9 in., which gives an appearance of a clinker-built boat; the stripes stand out about $\frac{1}{4}$ in. above the spaces between. The blubber was rather tough and fibrous, and not very rich; it was from 10 to 4 in. thick on the back. The eye was about 4 in. in diameter. The entire skeleton, with the baleen, was purchased by Dr. A. Günther for the British Museum of Natural History, and is being prepared under the supervision of Mr. E. Gerrard. The rudimentary pelvic bones were fortunately secured, and were found to be 16 in. long: they appeared more like muscles than bones. The state of these bones and of other parts of the whale led Mr. Gerrard to think that it was, despite its immense size, still immature. Although Sibbald's Rorqual has not hitherto been recorded by name from the Irish coast, Mr. More thinks that no doubt the whale killed at Cork in 1844, and probably some of the other large Rorquals mentioned by Thompson (Nat. Hist. Ireland, vol. iv.), belonged to this species. In addition to the gentlemen whose names I have already mentioned, I have to thank

Dr. R. F. Scharff, of the Dublin Museum of Science and Art, and Mr. W. Higginbotham, of Wexford, for kind assistance. — G. H. BARRETT HAMILTON (Kilmanock, New Ross, Co. Wexford).

BIRDS.

The Icterine Warbler in Holderness.—An adult male example of *Hypolais icterina*, which I recently examined, was obtained at Easington, in Holderness, on May 28th, and brought to Mr. Philip Loten, of that place, by a boy, but whether picked up dead, or killed by a stone or with a catapult, is uncertain, as several small birds were brought to Mr. Loten's shop by the village boys about that time. It was skinned and put on one side, under the doubtful impression that it might be only a Wood Wren. It is very possible that the Icterine Warbler occurs more frequently than is generally supposed during migration in spring and autumn on the east coast, passing unrecognised in the crowd of various small migrants then on the move. This Yorkshire specimen of *Hypolais icterina*, compared with four skins of *H. polyglotta* obtained near Tangiers by Mr. Hewetson last spring, is altogether a larger bird, and with the wings proportionately longer, reaching to nearly the middle of the tail, and the yellow colour of the under parts is less intense. From the known range of the two, *H. icterina* is much more likely to occur on migration in Great Britain than its congener, although doubtless this too will be recorded sooner or later as having turned up, and not improbably in the south-western counties or in Ireland. Mr. Gütke says ('Die Vogelwarte Helgoland') that forty or fifty years ago the Icterine Warbler was quite common, but now, with the changed climate in the spring, it has become so rare that only one or two are sometimes seen on exceptionally warm days in May, and on the return journey in August it is rarer still, although occasionally one or another may be found in the potato-plots. It has once nested in Heligoland in 1876, when a pair brought off five young in his neighbour's garden. The Polyglott Warbler has occurred once, on May 23rd, in 1846. In the present example the second primary is a little, but decidedly, longer than the fourth. This is worthy of notice, as Mr. Seebohm (Brit. Mus. Cat. Birds, v. p. 76) says, "second primary generally between the fourth and fifth." Prof. Newton also (Yarrell's Brit. Birds, vol. i. p. 362), pointing out the distinguishing points between this and the Polyglott Warbler, says:—"The second primary in the Icterine Warbler is longer than the fifth, and equal, or nearly equal, to the fourth, which is shorter than the third, while in its ally the second primary is equal to the sixth, and the third and fourth are largest." So that it appears the relative proportion of the primaries is hardly to be depended upon as a permanent character in distinguishing this species. The Easington bird, and first Yorkshire example, is now in the possession of Mr. W. Eagle Clarke, of the Science and Art Museum, Edinburgh.

Mr. Clarke has since informed me that he finds the second primary is .035 in. longer than the fourth; thus it is the second longest in the wing, the third being the longest.—JOHN CORDEAUX (Great Cotes, Ulceby).

The Lesser Whitethroat in Devon.—Having read Mr. Pidsley's 'Birds of Devon,' and the letters in 'The Zoologist' from Mr. D'Urban and the Rev. M. A. Mathew on the subject, I should be glad of the opportunity of stating that five years ago when I was at Blundell's School, Tiverton, I myself found a nest of the Lesser Whitethroat containing five eggs. I could point out the exact spot now. It was at a place about seventy yards north-east of the intersection of the river Loman and the railway, a quarter of a mile or so from the school. I saw the hen bird clearly on several occasions. In the collection of a schoolfellow there were two eggs of this species which I think were found in the same neighbourhood. I remember also our house-boy on one occasion bringing three unblown eggs of this bird which he had just found. These facts, I think, are sufficiently conclusive of the nesting of the Lesser Whitethroat in North Devon.—MAURICE STUBBS (Wavertree Rectory, Liverpool).

The Lesser Whitethroat in Devon.—As there seems to be a certain amount of conflicting evidence respecting the distribution of *Sylvia curruca* in this county, I may say that, in my 'Birds of Devonshire,' I have remarked that it is "a rare summer visitant, but has not as yet been found breeding in the county." With regard to this latter statement, I am now convinced that the Lesser Whitethroat *has* nested in Devon, and still does so, as since the publication of the 'Birds of Devonshire,' an ornithological correspondent who has resided for seven years in South Devon wrote me that, in June, 1884, he discovered a nest of this bird containing four eggs, and also another nest in 1887, both clutches being at the present time in his cabinet. A third nest of four eggs was obtained by the same gentleman from Dawlish, near Exeter, and given to me, and are now in my cabinet. I should be glad therefore if those who possess a copy of the 'Birds of Devonshire' would substitute the foregoing remarks for my statement that "it has not as yet been found breeding in the county," as up to the time of publication I had no knowledge, nor was I aware that the Lesser Whitethroat had ever been discovered nesting in Devon, although no trouble was spared by me in endeavouring to establish it as a breeding species.—WM. E. H. PIDSLLEY (Blue Hayes House, Broadclyst, Exeter).

Unusual nesting-place for a Magpie.—When staying with my brother at Wiston, near Leicester, last spring. I was surprised, when driving along a well-used turnpike-road, to see a Magpie's nest in the road-side hedge, and not more than eight feet from the ground. The nest was completed, but had no eggs in it. Though there are a good number of Magpies about, they usually build in the high trees which abound in the hedgerows

of large pastures. I was almost as much struck with the lowness of the nest as the exposed position in which it was placed.—J. WHITAKER (Rainworth, Notts).

Montagu's Harrier breeding in Sussex.—Mr. Pratt, of Brighton, has a female specimen of this rare bird. It was shot at Patcham, near Brighton, on June 17th, among sand-heaps and fern. When picked up a lark's egg was found in its throat, with which perhaps it may have been about to feed its young. The plumage showed that the bird had been brooding, the under parts being in places denuded of feathers.—H. D. GORDON (Harting Vicarage, Petersfield).

[What a shame to have killed this bird in June, just at a time when it probably had young to provide for! The species is always sufficiently rare to stand in need of all the protection that can be given to it.—ED.]

On *Lanius excubitor* and *Lanius major*.—There can be little doubt that Mr. Aplin is wise in suggesting the advisability of more criticism being desirable towards the solution of ornithological enigmas through the press. But whether the vexed question of the specific or non-specific character of *Lanius excubitor* with one white wing-spot can be determined thereby is a little questionable. Whilst anxious for further knowledge in this matter myself, I am conscious that a few facts are worth many theories in scientific questions, and propose therefore simply to note, for the benefit of those interested in these most attractive birds, a few observations which have been based upon specimens of my own:—(1). As a rule, Grey Shrikes (if adult), having two wing-spots, have pale grey rumps and upper tail-coverts. An exception to this rule, however, is at hand in a very old bird from Saxony. (2). In Grey Shrikes with only one wing-spot, *i. e.* with no white on the secondaries, the general coloration above is decidedly darker than is the case in typical *L. excubitor*, including the rump and upper tail-coverts; and the writer certainly has no recollection of having seen a specimen with a white rump. (3). In all the specimens of *L. major* examined, some degree of vermiculation beneath may be observed, except in a specimen from the Volga, which, however, from its more strongly hooked bill and somewhat paler general colouring, might be a hybrid with *L. homeyeri*. 4. In the young of both forms of the Grey Shrikes, the under surface of the body seems always to be more or less vermiculated. A very young bird, labelled *L. homeyeri*, has a perfectly plain under surface, *i. e.* without any cross-barring whatever. It would be exceedingly interesting to discover in what proportion the two forms known as *excubitor* and *major* are met with in England. Probably they might be put down at about half-and-half, but, as this is largely guesswork, it cannot be worth much. For further elucidation of this important point, it would be a great assistance if those who record the occurrence of Grey Shrikes in 'The Zoologist,' or elsewhere,

would make a point of ascertaining, first of all, to which of the two forms their records relate, giving the result of their examination.—J. BACKHOUSE (Harrogate).

Crossbills and Siskins breeding in Co. Waterford.—The Crossbills that bred here last year (Zool. 1890, p. 199) seem to have deserted us, but have been replaced this spring by several pairs of Siskins, birds equally deserving of the name of gipsy migrants. Since my former notice of this species (Zool. 1883, p. 493), I have seldom seen Siskins in the breeding season, and until this year have not seen a nest here since 1857. On the 21st April last a Siskin's nest was pointed out to me, far out from the trunk, on a long pendent branch of an old silver fir, over forty feet from the ground, overhanging the road that leads to my stables. So dense was the foliage that I could hardly distinguish the nest, but I repeatedly saw the Siskins going to it, first alighting on bare sprays of the branch, and then creeping into it. On the 5th May, the young Siskins having been heard from the nest, my coachman ascended the silver fir, and five little Siskins, fully fledged, took flight successively to neighbouring trees. We caught and caged two. The parents, especially the old male, approached us closely with solicitous cries. The nest is not placed on the main stem of the branch, but on one of the fan-like expansions growing over it, another of which, dense with green foliage or needles of the fir, overspread it, and concealed it from Magpies, just leaving head-room for the Siskins to enter and leave it. Unlike the nest described by Mr. Ellison (Zool. 1886, p. 340), this wanted the foundation of twigs, being composed of green moss, with a few tufts of silvery lichens and root-fibres, white hairs and old thistle-down. Within were a few feathers, with finer vegetable down, hairs, &c. Four or five other pairs of Siskins frequent groups of similar old silver and Scotch firs in other parts of the demesne this spring, leaving no doubt that they are breeding there. On the 18th May a pair of Siskins were discovered to be completing a new nest on a long branch of a larch not twenty feet from the ground, close to where I had repeatedly observed Siskins, and heard one sing on 31st March and 5th April. It was in the same group of trees in which a pair of Crossbills bred last year, on the hill not very far from the site of the last nest. I saw the female enter the nest and wriggle round, as though settling it, and heard the male on the 18th and following days warbling on an adjoining tree. On the 24th and 25th the hen bird was observed to be sitting in the nest, and on the 26th I took it. It was overshadowed by sprigs of the larch, as the two former nests had been by tufts of the Scotch and silver firs. It partly rested on the main stem of the branch, and partly on offshoots, and was composed of green moss mixed with a little sheep's wool, and lined with fine dried grass-stems and hairs. It contained four eggs, large for a Siskin, with the pale blue ground colour of our native Siskin's eggs, sparingly marked with pale red, and some few

bold spots of blackish red-brown. They showed no evidence of incubation. On the 23rd May my coachman saw a brood of five Siskins on tall trees, where Siskins had been noticed for weeks past, near the stable-yard, and two other pairs frequented other groups of tall silver and spruce firs near the garden. Altogether I know of seven or eight spots where I believe Siskins to have bred here this spring. On the 21st May, when in the plantation at the Giant's Rock, I saw a brood of young full-grown Crossbills accompanying their parents, and following them from tree to tree, crying "chit-oo, chit-oo, chit, chit," as they importuned them for food. Several other persons here have also observed the broods of Crossbills recently on the move in the plantations. On the 15th May a second Siskin's nest was discovered here, not far from a part of the plantation where I had repeatedly observed a male Siskin singing since the end of March. It was at the extremity of an upper branch of a Scotch fir, more than thirty feet from the ground, and was shaded overhead by the thick tufts of green needles. This tree stood right opposite, and not many yards from, the bay window of the sitting-room of a house on the top of the hill among the plantations, the same house in the vicinity of which three Crossbill's nests were discovered last year. The female Siskin was seen to be sitting, and could with difficulty be got to leave the nest. When this was done, to get a sight of her, she would quietly flit to an adjoining tree, and return in a few moments to the nest. Having ascertained that there were eggs, I proceeded to cut the branch, first having it supported by my man from the top of the tree with a long crooked rod. Having cut the branch, we carefully pulled it in until the nest was reached, the Siskin continuing to sit while we were drawing in the branch. After it was cut, I thus had a full view of her at close quarters. The nest has a number of small dead twigs of Scotch fir incorporated with its foundation and sides, and is composed of green moss, with a few tufts of fine silver-coloured lichens and a little fine dried grass, which latter forms the principal lining, there being no feathers in the nest, but a quantity of strong black horse-hair forms the rim, both internally and externally. It measures about three and half inches in external diameter, and less than two inches inside. The five eggs, which had not been long incubated, have the same greenish blue ground colour as the three other Irish clutches of Siskin's eggs I have seen, not quite so blue as Lesser Redpolls' eggs, but of a more decided shade than two continental clutches of Siskin's eggs, which are very pallid. Each egg is zoned round the larger end with pale red spots, and there is an occasional spot and streak, irregularly placed, of blackish red-brown. In an adjoining tree, also a Scotch fir, and in a similar position at the end of an upper branch, is the nest of a Goldfinch which contained, on the 16th May, young several days old. Thus the Goldfinch and Siskin were next-door neighbours. This is the earliest brood of Goldfinch I have met with. On the 7th May,

Mr. James Johnston, of Bray, Co. Wicklow, kindly sent me a nest of Siskin in the branch of a spruce fir, taken by him in the forest near Powerscourt Waterfall, where these birds breed regularly. It is built of similar materials to the nest last described, except that the rim of horse-hair is wanting. There were four eggs in the last stage of incubation, which were unfortunately broken in transit. — R. J. USSHER (Cappagh, Co. Waterford).

Reminiscences of the Kite in Lincolnshire.—I lately heard the following from an old man, 77 years of age, now a considerable farmer, but who began life as an assistant to a gamekeeper. He well remembers when he was a boy that the "gleade" was very common in the big woods near Louth—he had seen scores of them; during a great part of the day they were on the wing, flying and soaring in circles at a great elevation on motionless wings. His father kept a good many geese, and almost the first job he was put to as a child was to tent goslings. If the least remiss in his duty, down swooped one of the ever-watchful Kites, and in an instant one of his charges was carried off. Not only were they skilful foragers in the poultry-yard, but equally adept at carrying off linen from the drying-grounds and hedges, illustrating the well-known line of Shakespeare—

"When the Kite builds look to lesser linen."

Winter's Tale, Act iv. Sc. 2.

Handkerchiefs, socks, and specially children's clothing, disappeared, to be used as building materials for their nests; and he had many a time to climb trees in the woods to recover these lost articles.—JOHN CORDEAUX (Great Cotes, Ulceby).

Redwings singing in April.—During the afternoon of April 11th, when under some very tall trees, I heard a twittering song of birds which I at first took for Starlings, but on looking through my glasses I found the notes proceeded from a small flock of Redwings. The song was something like that of the Starling, with several notes like those of the Song Thrush, but much lower. The sun was shining, and the song continued for some time, ceasing occasionally and then recommencing, several birds singing at the same time. I never before heard the Redwing sing in England.—J. WHITAKER (Rainworth, Notts).

[Some years ago there was a long discussion in this journal on the question whether the Redwing ever sings in England, the result of which tended to show that it is very exceptional, doubtless because this bird, being a winter visitant, leaves the country before the usual time for its coming into song. See 'Zoologist,' 1864, pp. 8946, 9040, 9104, 9106.—ED.]

The Wood Warbler and White Wagtail in the Midlands.—If Mr. Montagu Browne would now take the trouble of visiting Charnwood Forest, he might (provided he really knows a live Wood Warbler) at once

satisfy himself as to its occurrence in Leicestershire. The bird is now there in about its usual numbers. In South Notts we have a few pairs breeding regularly every year. The small woods about Gedling, Burton Joyce, and Bulcote all being tenanted. Clifton Grove generally contains a pair, and it may also be met with in the parishes of Barton and Thrumpton, and in the woods on the Kingston estate. In the neighbouring county of Derbyshire I met with a few pairs near Hayfield, in the High Peak, and also at Ashover in the Amber Vale. I have little doubt that further research would find it breeding in the woods at Miller's Dale, and also in suitable localities along the course of the Derwent as far south as Derby. A recent writer in 'Science Gossip' alludes to its abundance near the village of Birley, in North Derbyshire. In the low-lying parts of the county it is probably only seen on migration, a large tract of country in the Trent Valley being very unsuitable to its habits. In Warwickshire I have identified the Wood Warbler in Frankton Wood, near to the village of Stretton-on-Dunsmore. Ryton Wood, in the same locality, also looks a very promising place for its occurrence. I have received eggs from Shropshire. In passing, I may refer to another species which Mr. Browne treats in his original manner—*viz.* the White Wagtail. During the present spring I have identified eight specimens of this bird within a very short distance of the Leicestershire border, and I have been careful to acquire evidence which places the matter beyond dispute. I should be glad to hear if this species has lately been observed in Exton Park. It is to be hoped that ere long some higher authority will prepare a more complete account of the Birds of Leicestershire than the existing work by Mr. Browne.—F. B. WHITLOCK (Beeston, Notts).

Interbreeding of the Pied and White Wagtails.—At the present time there may be seen in this village a Wagtail's nest with young, of which the parents are a cock Pied Wagtail and a hen White Wagtail. The nest is built about six feet from the ground in a *pyracanthus* trained against the wall of a house not far from my own; six eggs were laid and nearly, if not quite, all hatched. The hen bird is very tame, and has given me such good opportunities of seeing her on the nest, and also through a glass when on the ground and on the roof of a building, that I am certain of her identity; she has a black head strongly contrasted with her grey back. Dr. Günther informs me that a similar case of interbreeding, mentioned on his authority in Mr. Saunders' 'Illustrated Manual,' occurred in 1889 at Woolpit, which joins our village. Most of the readers of 'The Zoologist' have seen the family group of Wagtails in the National Collection which were obtained in Norfolk, in which the cock is a White and the hen a Pied Wagtail. Now comes the question, would the hybrids be fertile, either paired with one another or with a typical example of either the Pied or White Wagtail? Again, would the mature hybrids develop

an intermediate plumage, or resemble one or other parent? Both cases occur when the Black and Grey Crows interbreed. Pied Wagtails nest in our ivy wall every year, and the hen birds are always tame, so I have a pretty good acquaintance with their plumage, but the hen bird of the nest above mentioned is quite unlike any Wagtail I have ever seen here.—
JULIAN G. TUCK (Tostock Rectory, Bury St. Edmunds).

Scops Owl in Norfolk.—A male of this species, in good plumage and condition, was shot at Walsingham Abbey, by a keeper of Mr. Henry Lee Warner, on May 21st, 1891. The keeper mistook it for a "Blue Hawk" (*i. e.* male Sparrowhawk), as it flew down a glade, the afternoon being cold, dull, and rainy, otherwise it would not have been interfered with; for Owls receive careful protection from the proprietor of Walsingham Abbey. The keeper at once took the bird to Mr. Lee Warner, who has preserved it. Messrs. Gurney and Southwell, writing of this species ('List of Norfolk Birds,' 1886), remark that "The only example obtained in the last fifty-eight years, and indeed the only one which can be implicitly relied on, was one picked up by a boy, in November, 1861, on the road which runs beneath the lighthouse at Cromer." Prof. Newton (4th ed. Yarrell's 'British Birds') writes that this "species, which is known as a regular summer migrant in most parts of Southern Europe, arriving and departing with the Swallow, is in this country but a casual visitor; and that we have it at all is probably due to the fact that the examples observed have been stragglers which have lost their way." The capture of this species in Norfolk, at such opposite seasons as May and November, coincides with the migratory habits of this pretty little Owl, for these months are likely periods for a straggler to arrive on our shores. The stomach of this specimen was entirely filled with the remains of beetles.—H. W. FEILDEN (Wells, Norfolk).

Short-eared Owls in Essex in May.—Whilst looking for the nests of some Gulls, *Larus ridibundus*, on the bentlings near Walton-on-the-Naze, on Whit-Monday last, I flushed a Short-eared Owl. It had just killed a Black-headed Gull, and had commenced to pluck and eat it; the blood was flowing from the dead bird. Being very fearless, it did not fly more than ten yards at a time; most probably it was breeding somewhere near. It was about one mile distant from the spot where I saw Short-eared Owls in August, 1884, and two miles from where they bred in 1889 (see Zool. 1889, p. 453).—F. KERRY (Harwich).

Tufted Ducks nesting in Nottinghamshire.—We have had three pairs of Tufted Ducks nesting this summer on the islands in the lake here close to the house. One of these nests is on the top of a Wild Ducks' nest, the Wild Ducks having left about a month before the Tufted Ducks began to lay.—J. WHITAKER (Rainworth, Notts).

Variety of the Common Heron.—I have seen recently a Common Heron, *Ardea cinerea*, which was caught on board a fishing-smack in the North Sea, and brought, in the flesh, to the shop of Mr. Jefferies, of Grimsby, for preservation. It is apparently an adult female in good bright healthy plumage. The peculiarity of this bird is the very remarkable abnormal colouring of the soft parts, so very different from the ordinary type, so much so that Mr. Jefferies insisted it must be distinct. The irides are red—that is, red-currant colour; lores a light purplish red; posterior half of beak red, anterior yellow; legs and feet red, the front scutella on the tarsi almost coral-red, approaching in colour the same parts in the French Partridge, and subsequently drying to a brownish red.—JOHN CORDEAUX (Great Cotes, Ulceby).

Notes from Great Yarmouth.—During the shooting season of 1890–91 the following birds have been shot or seen in the vicinity of Great Yarmouth:—Three Pectoral Sandpipers on Sept. 10th, 12th, and 13th. A Spotted Redshank, Oct. 3rd. Buffon's Skua, on Breydon Water, Oct. 20th; the crop was full of earthworms. A Pomatorhine Skua, same date, on beach. Seven Purple Sandpipers in October. Large flocks of Woodcocks on Oct. 20th, 29th, and first week in November. Storm Petrel taken alive from a cat on 27th. Red-necked Phalarope on the 29th. Three Polish Swans brought to market from the Broads, Oct. 30th. Six Shovellers and several Scaups in market, Nov. 1st, and Long-tailed Duck on the 3rd. Redshanks shot Nov. 8th and Dec. 22nd; unusual here in winter. Eight Shore Larks trapped early in November. Snow Buntings plentiful first half November. Several Bearded Tits in market on Nov. 19th. Twenty Swans seen on Breydon Nov. 29th. Hungry Hooded Crows seen chasing Dunlins Nov. 30th. A Wigeon struck telegraph-wire on Dec. 7th. Three Bewick's Swans, two mature, one young, in market Dec. 6th. A number of dead Kittiwakes washed up on beach Dec. 14th. On Dec. 16th the sea off Yarmouth was alive with Scaup and other "hard-weather fowl." Bewick's Swan seen in the market on Dec. 20th; also, same date, two White-fronted Geese, sixteen Pochards, twenty-three Scaups, twenty Tufted Ducks, one Shoveller, nine Wigeon, and one Shellduck in the market. On the same date nineteen Woodcocks in market, and a great number and variety of other birds. Three Mute Swans (undoubtedly wild) in market Dec. 23rd. Seven Wood Larks shot on Dec. 20th. During the last week in December a great number of starving Black-headed Gulls were caught in clap-nets; several were taken by boys by means of tubs, soletrunks, &c., tilted up by sticks, and dropped over them by means of a long cord. Two Pink-footed Geese in market Dec. 30th. Flock of Turnstones seen on beach Dec. 30th, and two Bean Geese killed on the 31st. Saw two large flocks of Brent Geese on Jan. 6th; several shot on Breydon next day. Fork-tailed Petrel shot on the beach Jan. 6th, and a Little Gull (immature) on the 7th. Two

adult Whooper Swans in market on Jan. 12th, and Red-necked Grebe on the 20th: another soon after. Bean Goose, weighing 7 lbs., in market on the 24th. Three or four Sclavonian Grebes shot early in January. A flock of about ninety Swans seen on the marshes on the 20th. Montagu's Harrier in market on the 31st. Smew (adult males in particular) were exceptionally numerous in January and February. — A. PATTERSON & B. DYE (Great Yarmouth).

Albino Twites in Ireland.—Early last year Mr. Robert A. Simms, of Ballymena, Co. Antrim, told me that a shepherd named Arthur M'Allister had a white bird alive, which he obtained under the following circumstances:—In the summer of 1887, while his children were playing on a mountain near Newtown Crommelin, North Antrim, they flushed from the ground three white fledgling birds, all of which they caught. Two died within a day or two, and were thrown away; but the third, which is the subject of this note, attracted the attention of Mr. Simms, who fortunately happened to be in the district about the time. It lived, as he has since told me, in the possession of the shepherd until the middle of December, 1890. On the 16th December Mr. Simms obtained the dead bird, and sent it to Mr. Robert Patterson, of Belfast, who had it stuffed, and at the request of Mr. Simms, very kindly sent it to me. The bird is a Twite, *Linota flavirostris*, and, with the exception of a small rust-coloured patch on the rump (characteristic of the male bird), is perfectly white; the legs and claws are also nearly white, and the bill is pinky, rather than yellow; in the living bird the eyes were pink, as in all albinos. It is worthy of note that three albino birds were produced from one nest.—EDGAR R. WAITE (The Museum, Leeds).

Egyptian Goose in Devon.—An adult male of this species was shot on the river Exe on May 9th. It was in good plumage, and not the slightest trace of its ever having been in captivity was visible. The probable cause of its appearance at that time of the year is that possibly during the past severe winter a pair of these birds wandered from their home, wherever that might be; one no doubt fell to the gun of a wildfowler, whilst the survivor has wandered about in search of its companion up to the time of its destruction in May last. From enquiries made, I find that no Egyptian Geese are kept within several miles of the place where this bird was shot; in fact, I think I am right in saying that none are kept in this county. Like the Canada Goose, it is an introduced species, and has never been known to cross the Mediterranean in a wild state, hence my reason for not including it in my 'Birds of Devonshire.' The bird in question is now being preserved for my collection.—WM. E. H. PIDSLLEY (Blue Hayes House, Broadclyst, Devon).

Dipper nesting in March.—While fishing on the North Esk, Forfarshire, on March 28th, I found the nest of a Water Ouzel, containing young

ones. This fact will doubtless interest many of your readers. The nest was finely sheltered, and the old birds were very busy feeding their brood. In February we had some lovely days ; but March was very severe. In the face of the past month's inclemency these hardy little birds have succeeded thus far in rearing their young. I have in former years found the Dipper's nest in the month of March, but never so early with young. Some ornithologists fix the Dipper's nidification about the middle of April. Now, in my experience, which extends over a long course of years, I have found the Dipper building at the end of February and throughout March.—R. N. KERR (King Street, Dundee).

Golden Oriole in Co. Galway.—An adult male Golden Oriole, *Oriolus galbula*, was obtained at Letterfrank, Co. Galway, on the 20th of April last. It is an exceedingly rare bird in Ireland in the adult plumage; the specimens that have come under my notice (only about three or four) have been all females or immature males, and were met with chiefly on the east coast.—EDWARD WILLIAMS (2, Dame Street, Dublin).

SCIENTIFIC SOCIETIES.

LINNEAN SOCIETY OF LONDON.

June 18.—Prof. STEWART, President, in the chair.

Messrs. Herbert Jones and John Bidgood were admitted Fellows of the Society, and Mr. C. W. Slater was elected.

Mr. W. H. Beeby exhibited specimens of *Hieracium protractum* and other plants collected in Shetland.

Mr. Stuart Samuel exhibited a dwarf specimen of *Acer palmatum*, and made some remarks on the dwarf trees artificially produced by the Japanese.

Mr. R. V. Sherring showed some cases of dried Bananas, and described a new method of preservation adopted in Jamaica to save waste of small parcels of fruit which would be otherwise unsaleable.

Mr. A. W. Bennett exhibited and made remarks upon a specimen of *Selaginella lepidophylla*, which was found to possess remarkable vitality, and upon proper treatment to resume its normal appearance after having been gathered some months.

Dr. R. A. Prior exhibited samples of the Spiked Star of Bethlehem, *Ornithogalum pyrenaicum*, and stated that although described in British Floras as a rare plant, it is so abundant in the hill pastures around Bath that it is brought to the market there in large quantities under the name of French Asparagus and sold for a penny a bunch.

Mr. R. A. Rolfe showed two hybrid *Odontoglossums* with the parent

plants, namely, *O. wilckeanum* (produced from *O. crispum* and *O. luteo-purpureum*) and *O. excellens* (produced from *O. pescatorei* and *O. triumphans*). These had first appeared as natural hybrids out of imported plants, and the parentage was subsequently ascertained under cultivation.

On behalf of Sir George Macpherson Grant, Mr. J. E. Harting exhibited some curiously abnormal horns of the Roe-deer (the result of disease) which had been taken from an animal found dead near Forres, N. B. For the purpose of comparison, he exhibited some normal heads of the Roe from other parts of Scotland and from Germany, and made some remarks on the causes of variation in the size and form of the antlers to which Roe-deer were peculiarly liable.

A paper was then read by Mr. Spencer Moore on the true nature of "callus," and in continuation of former remarks on the same subject (Linn. Soc. Journ., Bot. vol. xxvii. Nos. 187, 188). He showed that the outer sieve-plates of the Fig are obliterated by a substance giving all the dye reactions of callus, which does not peptonise and will not yield proteid reactions. Many of the inner sieve-plates he found to be stopped up with a proteid callus resembling in every way the substance of Ballia stoppers, and the proteid callus of the Vegetable Marrow. It appeared that true callus would dissolve in a solution of gum-arabic, but whether by agency of a ferment or of an acid he had not yet determined.

A second paper by Mr. Spencer Moore dealt with the alleged existence of protein in the walls of vegetable cells, and the microscopical detection of glucosides therein.

ENTOMOLOGICAL SOCIETY OF LONDON.

July 1, 1891. — Mr. FREDERICK DUCANE GODMAN, M.A., F.R.S., President, in the chair.

The Rev. John Isabell, of St. Sennen Rectory, Penzance, was elected a Fellow of the Society.

Mr. Jacoby exhibited a specimen of a species of Coleoptera belonging to the family *Galerucidæ*, with the maxillary palpi extraordinarily developed.

The Rev. Canon Fowler, on behalf of Mr. Wroughton, Conservator of Forests, Poona, exhibited specimens of a bug imitating an ant, *Polyrachis spiniger*, and of a spider imitating a species of *Mutilla*, and read the following notes:—"I have taken a good many specimens of a bug which has achieved a very fair imitation of *Polyrachis spiniger* (under the same stone with which it may be found), even to the extent of evolving a pedicle and spines in what, were it an ant, would be its metanotum. Curiously enough, however, these spines are apparently not alike in any two specimens. Is it that this bug is still waiting for one of its race to accidentally sport spines more like those of *P. spiniger*, and thus to set the ball of evolution rolling afresh?

or is it that the present rough copy of *spiniger's* spines is found sufficient to deceive? The bug has also been found in the Nilgherries. Mr. Rothney remarks on the above species:—"I have not found the species mimicking *Mutilla*; but in Calcutta and Barrackpore, where *P. spiniger* is a tree ant, forming its net by spinning together the twigs of a shrub, the mimicking bug also assumes arboreal habits, and may be found on the trunks of trees with the ants."

Mr. Porritt exhibited living specimens of *Eupithecia extensaria* and *Geometra smaragdaria*: the position assumed by the former proved conclusively that it had rightly been placed in the genus *Eupithecia*.

Mr. Crowley exhibited two specimens of a *Papilio* from the Khasia hills, belonging to an undescribed species allied to *P. papone*, sub-generic section *Chilades*. Col. Swinhoe remarked that he possessed a specimen from Northern Burmah. Mr. Moore and others took part in the discussion which followed.

Mr. Dallas Beeching exhibited a specimen of *Plusia moneta*, recently taken by himself at High Woods, Tonbridge, and specimens of *Gonopteryx cleopatra*, lent him for exhibition, which were alleged to have come from the same locality.

Dr. Algernon Chapman exhibited the larva of *Micropteryx calthella*, and read the following notes:—"The larvæ were obtained by placing moths in a cage with damp moss, dead leaves, and other *débris* off the surface of the ground. Into this the moths crept to a depth of half-an-inch, forcing their way into narrow cavities, and laid their eggs in groups of six or twelve. The eggs are clothed with fine hairs, tipped with refractive particles. The larva, about a millimetre in length, possesses on each segment eight processes of a globular form raised on a very slight pedicle. Besides the thoracic legs, each of the abdominal segments (eight) possesses a pair of minute jointed legs of the same type as the thoracic. There are also a pair of long jointed antennæ."

Col. Swinhoe read a paper "On new species of Heterocera from the Khasia Hills."

Mr. Crowley read a paper "On a new species of *Prothoe*."

Mr. C. J. Gahan read a paper "On the South American species of *Diabrotica*," Part II., being a continuation of Dr. Baly's paper on the same genus published in the Society's Transactions for 1890, Part I.

Mr. W. F. Kirby communicated a paper entitled "Notes on the Orthopterous family *Mecopodidæ*."

Prof. Westwood communicated a paper entitled "Notes on *Siphonophora artocarp*," referring to an appendage of the eyes which had been overlooked in his previous description. — H. GOSS & W. W. FOWLER, Hon. Secretaries.





L. Hutchinson del.

West. Newman sculp.

The Fox.
Vulpes vulgaris, Brisson.